CLAIMS

1. Closure device for an opening in a layer of tissue, comprising:

a plurality of wings which provide bearing areas and/or hold bearing areas on tissue surrounding the opening; and

a base part;

wherein the wings are held by means of respective joints for swivelling movement on the base part.

2. Closure device in accordance with claim 1, wherein the joints are hinged joints.

3. Closure device in accordance with claim 1, wherein the joints are film hinges.

4. Closure device in accordance with claim 1, wherein swivel axes of the joints are oriented substantially at a right angle to a central axis of the base part.

5. Closure device in accordance with claim 1, wherein the swivel axes of the joints lie parallel to tangents to an outer circumference of the base part.

6. Closure device in accordance with claim 1, wherein the wings are held integrally on the base part.

7. Closure device in accordance with claim 1, wherein the wings outside of the associated joints are of substantially rigid design.

8. Closure device in accordance with claim 1, wherein the wings hold bearing elements made of a bendable material.

9. Closure device in accordance with claim 8, wherein a bearing element is spanned between adjacent wings.

10. Closure device in accordance with claim 8, wherein in a flapped-in position the bearing elements are folded.

11. Closure device in accordance with claim 1, wherein the base part outside of the joints is of substantially rigid design.

12. Closure device in accordance with claim 1, wherein the wings are arranged for swivelling movement on the base part such that in a flapped-in position they do not protrude laterally over the base part.

13. Closure device in accordance with claim 1, wherein in a flapped-out position, the wings form bearing areas and/or hold bearing areas on the tissue.

14. Closure device in accordance with claim 13, wherein in the flapped-out position, the wings are oriented substantially at a right angle to a central axis of the base part.

15. Closure device in accordance with claim 1, wherein the joints are set back on the base part in relation to a circumferential rim of the base part.

16. Closure device in accordance with claim 1, wherein the joints are seated on an upper side of the base part, which faces the tissue when bearing areas bear on the tissue.

17. Closure device in accordance with claim 1, wherein at least two wings are provided.

18. Closure device in accordance with claim 1, wherein diametrically opposed wings are provided.

19. Closure device in accordance with claim 1, wherein the wings are arranged around the circumference of the base part.

20. Closure device in accordance with claim 1, wherein the base part has a round outer cross section.

21. Closure device in accordance with claim 1, wherein a suture thread is held on the base part.

22. Closure device in accordance with claim 1, wherein the base part has spaced openings for a suture thread to pass therethrough.

23. Closure device in accordance with claim 1, wherein in a flapped-in position, the wings extend at an incline to the base part.

24. Closure device in accordance with claim 1, wherein the base part is provided with one or a plurality of bearing areas for the wings, which inhibit swivelling of the wings beyond a bearing position.

25. Closure device in accordance with claim 24, wherein the bearing area or bearing areas is or are formed on a ring-shaped bearing element.

26. Closure device in accordance with claim 24, wherein the wings comprise a support for placement against the associated bearing areas.

27. Closure device in accordance with claim 1, wherein the wings have a width which increases in the direction away from the base part.

28. Closure device in accordance with claim 1, wherein the base part is provided with a coupling for a holding mandrel.

29. Closure device in accordance with claim 1, wherein the base part comprises a holding element for the wings and a ring element.

30. Closure device in accordance with claim 29, wherein the ring element is held in the fashion of a snap closure on the holding element.

31. Applicator device for a closure device comprising:

a plurality of wings which provide bearing areas and/or hold bearing areas on tissue surrounding the opening; and

a base part;

wherein the wings are held by means of respective joints for swivelling movement on the base part;

said applicator device being insertable into a trocar sheath and comprising:

a positioning element which is longitudinally displaceable in the trocar sheath and by means of which the wings of the closure device are transferable from a flapped-in position in which the closure device is displaceable in the trocar sheath to a flapped-out position.

32. Applicator device for a closure device in accordance with claim 31, wherein the positioning element comprises bearing areas for the wings for swivelling these outwardly.

33. Applicator device for a closure device in accordance with claim 31, wherein a holding mandrel is provided for holding and positioning the closure device.

34. Applicator device for a closure device in accordance with claim 33, wherein the positioning element surrounds the holding mandrel at least partially.

35. Applicator device for a closure device in accordance with claim 33, wherein the holding mandrel is guided for longitudinal displacement on the positioning element.

36. Applicator device for a closure device in accordance with claim 33, wherein the positioning element provides a centering means for the holding mandrel.

37. Applicator device for a closure device in accordance with claim 33, wherein a suture thread is guided through the holding mandrel.

38. Applicator device for a closure device in accordance with claim 31, wherein a reducing sleeve or a set of reducing sleeves is provided for positioning the positioning element.